

REMARKS

This is the fifth Action on the above application but the first Action to object to claims 2, 4, 6, 7, 9 and 11. The Examiner is requested to keep in mind the several implications of this.

Nevertheless, these claims are amended above, except for claim 11, to attend to the formal objections, which do not relate to patentability, wherefor the amendments do not invoke any present Festo decision.

The objection to claim 11 fails to consider the art of the claim, fire fighting apparatus, in which the term "mist" is well understood and, therefore, widely used. For example, a search of the Patent Office website (see attached) for patents from just 1996-2002 turns up 526 patents reciting "fire" and "mist." A patent application needs to define its terms only for those skilled in the art.

This is the fifth Action on the above application but the first Action to cite the Diquattro patent. The Examiner is requested to keep in mind the several implications of this.

The rejection of independent claims 1, 13 and 14 under 35 USC 103 for obviousness from the Diquattro and Lockwood patents is traversed on the basis of the invention that the extinguishing medium source is (consists essentially of) a tube of the tube system that supplies the extinguishing medium to spray heads for putting out a fire.

ONLY the claimed invention recognizes that, where the tube system to the spray heads is long enough, its fire fighting apparatus does not need another extinguishing medium source.

Certainly the newly cited Diquattro patent does not recognize this element of the claimed invention because its fire extinguishant is in a bladder 25 in a receptacle 16 that, as

clearly shown in Fig. 1, is fat compared to the skinny conduits, e.g. 20. Fat neither discloses nor suggests skinny.

The bladder 25 in the Diquattro patent prevents loss of pressurizing medium from receptacle 10. See, column 2, lines 40-47. The bladder blocks tubes 12, 14, 18. Therefore, the Action is wrong and the receptacle 16 does not form part of a tube system to the spray heads as in the claimed invention.

However, the Action is right that the receptacles 16 are cylinders instead of tubes, as claimed.

These latter individual distinctions do not detract from the overall difference of the independently claimed invention from the Diquattro patent. ONLY THE INDEPENDENT CLAIMS RECOGNIZE THAT, WHERE THE TUBE SYSTEM TO THE SPRAY HEADS IS LONG ENOUGH, ITS FIRE FIGHTING APPARATUS DOES NOT NEED ANOTHER EXTINGUISHING MEDIUM SOURCE.

The same is true of the Lockwood patent. As clearly shown in Fig. 2, it includes, in addition to the tube 4, "... reservoir bottle 9, containing a backing supply of the extinguishant liquid." See, column 3, lines 34-35. It neither discloses nor suggests that the extinguishing medium source consists essentially of a long tube as independently claimed.

Since neither the Diquattro patent first cited in the fifth Action on the application nor the Lockwood patent combined with it for rejection disclose or suggest that the extinguishing medium source consists essentially of a long tube as independently claimed, the combination of these patents cannot, either. The combination of the patents of the rejection neither disclose nor suggest that the extinguishing medium source consists essentially of a long tube as independently claimed.

ONLY the independently claimed invention has it that the extinguishing medium source consists essentially of a long tube. Therefore, only the claimed invention is able to eliminate another extinguishing medium source found in the cited patents. The independently claimed invention thus has a structure different from the patents of the rejection for the same function. Different structure for the same function is patentable

According to item 6 of the Office action, it is, due to Diquattro, obvious to design the receptacles 16a - 16c into a tube shape of appropriate length to meet various operating requirements. We, however, submit that Diquattro does not disclose or teach that the receptacles could be designed into a tube shape. Column 3, lines 48-51 states no more than the receptacles may vary in size and capacity to meet various combinations of requirements. The receptacles of Diquattro also comprise a collapsible bladder 25. As these bladders are defined also in the single claim of Diquattro, they are hence to be considered as important features of the cited invention. It is unclear for the Applicant how such bladders could be included/combined with such a long tube as defined and disclosed in the present invention. It seems that the bladders clearly teaches away from the present invention where such bladders are of no use.

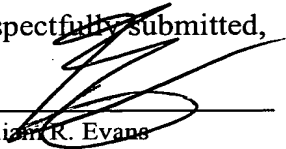
The Examiner combines Diquattro with Lockwood. We submit that Lockwood discloses a reservoir 9 filled with extinguishing medium said reservoir keeping the tube 4 pressurized, c. f. column 4. lines 1 to 7.

The Examiner has not supported in more detail his view that the definitions "which has a length of at least two hundred meters" in claim 13, and the definition "which has a length of at least about 1 km" in claim 14 do not make the invention inventive.

Referring to item 8 of the Office Action, we submit that item 13 in Figures 1 and 2 of Naumann has not a shape of a tube, and at least is not a tube; the item/space 15 has the shape of a tube and is even mentioned as a "gas compression tube", but item 15 does not contain liquid and is not in communication with item 13, the membrane 31 separating item 15 from 13. Item 13 does contain a bore 21 and a plurality of radial bores, but these do not make item 13 into a tube.

Reconsideration and allowance are, therefore, requested.

Respectfully submitted,



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1. (~~four~~ five times amended) A fire fighting apparatus comprising a plurality of spray heads (5a to 5e, 6a to 6e; 5a', 5b' to 5e'), a tube system (2, 3a to 3e, 4a to 4e; 2', 3a', 3e') for leading extinguishing medium to the spray heads, ~~at least one~~ a first drive gas source (9 ~~to 12~~; 9' ~~to 12~~) for driving the extinguishing medium at a high pressure via the tube system to the spray heads and release means (8a, 8b) for activating at least one of the spray heads, wherein:

the first ~~at least one~~ first drive gas source (9 ~~to 12~~; 9' ~~to 12~~) is coupled to an extinguishing medium source consisting essentially of a long tube (2;2') constituting part of the tube system.

2. (amended) A fire fighting apparatus according to claim 1, characterized in that a plurality of second drive gas sources (9 ~~10~~ to 12; 9' ~~10'~~ to 12') are arranged to the tube (2; 2') at ~~a~~ predetermined distances (1) from ~~each other~~ the first gas drive sources (9; 9') along the tube (2; 2').

4. (amended) A fire fighting apparatus according to claim 2, characterized in that the tube (2; 2') is divided into a number of main sections (1), each ~~of the~~ containing ~~a~~ at least one of the second drive gas sources (9; 9') having a high pressure.

6. (amended) A fire fighting apparatus according to claim 4, characterized in that the main sections (1) comprise a number of zones (A), each of them containing a group of the spray heads (5b to 5e, 6b, 6e'; 5b' to 5e') or sprinklers.

7. (amended) A fire fighting apparatus according to claim 6, characterized in that the release means (8a, 8b) are arranged along the tube (2;2') within the zones (A) for releasing a group of the spray heads (5b to 5e, 6b to 6e; 5b' to 5e') belonging to respectively to the zones.

9. (twice amended) A fire fighting apparatus according to claim 1 for being used in a tunnel (1; 1'), characterized in that the tube system (2, 3a to 3e, 4a to 4e; 2', 3a', 3e') follows the a longitudinal direction of the a tunnel (1; 1').

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Searching 1996-2002...

Results of Search in 1996-2002 db for:**fire AND mist:** 526 patents.**Hits 1 through 50 out of 526**[Next 50 Hits](#)[Jump To](#) [Refine Search](#)

PAT. NO.	Title
1 6,461,553	T Method of binding binder treated particles to fibers
2 6,454,876	T Method for eliminating malodors
3 6,454,017	T Upright fire protection nozzle
4 6,451,153	T Method of preparing a lignocellulosic material for the manufacture of a finished product
5 6,450,266	T Sprinkler arrangement for document storage
6 6,449,946	T Control apparatus for direct-injection engine
7 6,447,123	T Electrochromic device having a self-cleaning hydrophilic coating
8 6,446,731	T Smoke evacuating fire vehicle
9 6,443,233	T Appliance for introducing an inert gas into an extinguishant
10 6,442,938	T Waste processing system and fuel reformer used in the waste processing system
11 6,431,167	T Method of use of monomeric insulin as a means for improving the reproducibility of inhaled insulin
12 6,431,166	T Method of use of monomeric insulin as a means for improving the reproducibility of inhaled insulin
13 6,431,139	T Oscillating-piston engine
14 6,431,044	T Non-lethal personal defense device
15 6,429,658	T Engine ignition timing device
16 6,427,681	T Method of use of monomeric insulin as a means for improving the reproducibility of inhaled insulin
17 6,426,095	T Methods and compositions for retarding and eradicating infestation in trees and tree

